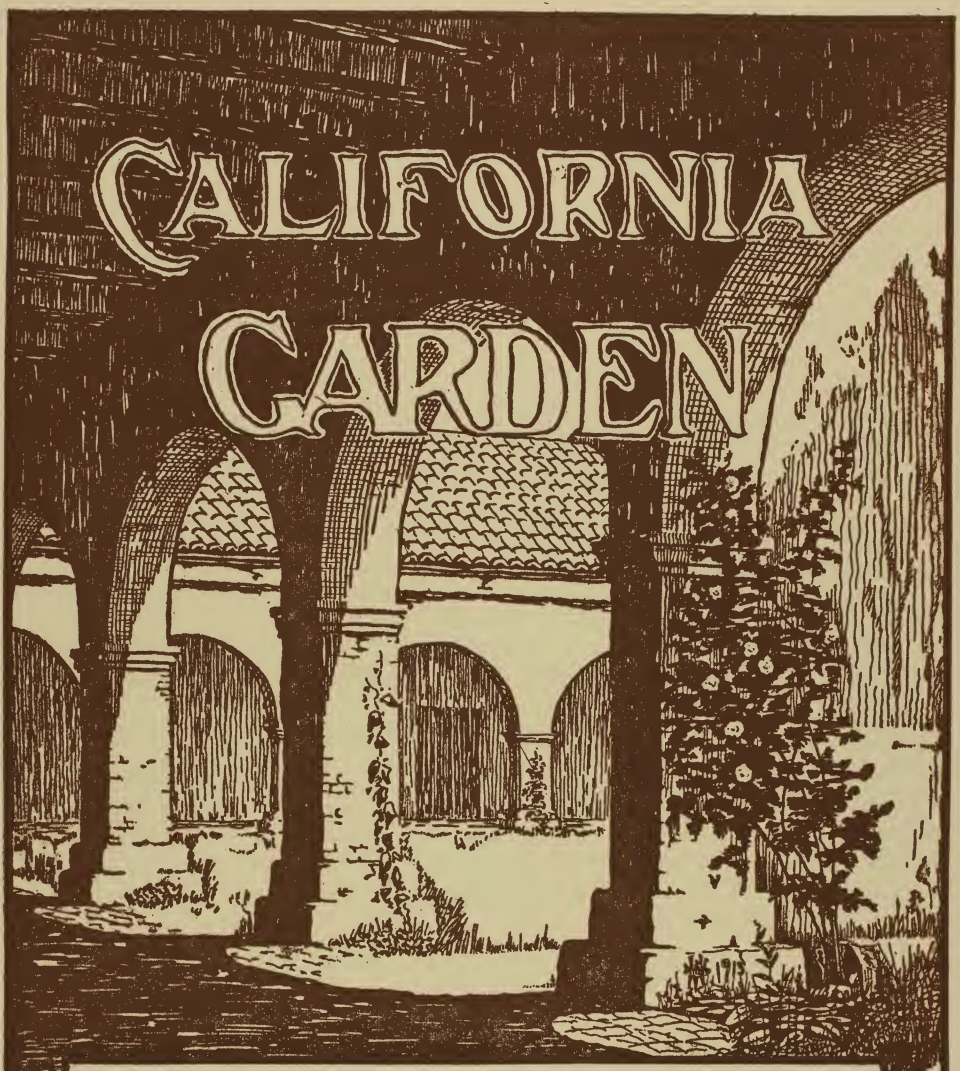


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WISTERIAS
By K. O. Sessions

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— Proprietors —

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The official organ of the San Diego Floral Association, now in its 21st year of continuous activities.

All interested in garden matters and civic beautification are invited to join. Dues $1.50 per year. Magazine and Membership combined $2.00 per year. P. O. Box 323, San Diego.

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THE WILLOW EYEBROWS OF SOUTHERN STREAMS

By Ruth R. Nelson

If this were a summer which had preceded the coming of the Padres into Alta California, the month of June would find the Southern Indians later known as the San Dieguenos) intent upon many of their most interesting activities. By this time the ancient valley sycamores would have cloaked the "graceful dancing attitudes" of their limbs and stalwart trunks with leaves of beautiful bronze-green. Every vanishing rivulet would have fringed itself with tall, grape-twined willows, which were quaintly termed "eyebrows of the streams" in early Spanish diaries. The gathering of certain seeds would already be in progress. It might even be warm enough for the children to have a grasshopper hunt, when a long deep ditch would be dug and, quite early, some morning before the grasshoppers had been warmed by the sunshine, the naked youngsters would beat their laughing way through the dewy, waist-high grasses, driving the cold grasshoppers before them into this pit. There the boys could catch them easily. Or perhaps a light fire would be made in the ditch, and the grasshoppers roasted, and later ground and added to small honey cakes or chia flour, for mush.

But the leafing of the willows perhaps marked the happy arrival of summer more than all else. With the exception of the live-oak, and the staple food which its acorns furnished, the willow seems to have entered into the lives of the Indians of Southern California more than any other native tree. From the spring house-building when the huts used all winter long were burned down and new ones built, to weaving, fishing and fire-making, in all of these the willow held an important place. Skirts of the women were made out of strips of willow bark. These skirts, made always in two sections, were divided at the hips, with the front apron sometimes formed of close strings netted together in place of the fringe of willow strips which always hung at the back.

From the exhaustive studies of Dr. Cephas L. Bard we learn that the small roots of the willow were used by the Indians for a febrifuge; while from other sources we learn that Indian mothers made small willow mats which they warmed and placed upon the stomachs of their babies when the general diet of the family had resulted in colic which threatened to keep the others awake.

For the first two or three years of their lives these Indian babies spent nearly all of their time in **la cuna,** a cradle woven from willow withes, which was slung upon the mother's back during the daytime, and hung up on the inner framework of the family hut, at night. From its fifth or sixth day an infant was always bathed three times a day until it was six months old, placed in its framework cradle at the end of the first month, and thus kept except when allowed to walk or run about for a very short time each day when this was possible. Among the straight bodies which resulted from this arrangement, no bow-legged nor stooped children were ever found.

In that well-loved book, The Adventures of Torqua, Charles Frederick Holder has his young Indian hero cut willow, both for bows and arrows, these latter he tipped with flint arrowheads bound to the shaft with strips of fresh squirrel skin, which, when dried, was hard and strong as steel. But willow was not, of course, the only material which entered into these important weapons. It was probably the only wood which Torqua could obtain in his hurried leave-taking from the mission. Juniper wood, from a lightning-blasted tree was believed by California Indians to make better bows than any other wood, because it was more elastic and lasted longer. Many bows of oak were in common use among them, as well as others of elder and ash from Palomar mountain. The arrows had a main shaft of cane about two feet long, with a foreshaft of greasewood hardened in

fire. Flint was of course not the only material used for arrowheads. Obsidian and gem-tipped arrows were brought to the coast Indians by desert tribes. Among the arrows displayed in Mr. Jessop's collection at Balboa Park are several with very sharply pointed heads of manzanita, cut into double and even triple points and having a very deadly look.

From Sneddon's ever-popular story of "Docas the Indian Boy" which has probably been read by every boy and girl who has passed through the San Diego County Schools during the past decade, the Indian mother made her fire by rubbing two dry willow sticks together, very hard, until a little pile of dust had gathered. Then she patiently struck her two flints together until a spark finally fell into the dust and caused a slight smouldering to commence. Then, very carefully, she dropped some dry leaves upon this burning dust, waiting for these to flame up, before she added a few small twigs, gradually increasing the size of the sticks until her fire was burning steadily. When this had been accomplished she threw five, smooth, gray stones into the blaze where they could heat for the cooking of the acorn mush, or mussel soup, already prepared in her water-tight cooking basket. As soon as she thought the stones were hot enough she used two green willow sticks to draw them from the coals, brushed them off quickly with a bunch of tules, and lifted them, one by one with a green stick having a hooked end which fitted around the stones, and let them drop into the basket. Almost immediately the contents began to boil and were soon sufficiently cooked to satisfy the Indian palate. It was a long preliminary process, considering the short period of actual cooking.

In Helen Bandini's "History of California," which contains a most interesting story of Indian life, basket weaving is well described. Squatting with the fire at her back to keep her warm without drying her basket materials, the Indian mother stitched away upon a rattlesnake basket which she was making to please the diety, Chinigchinich, so that he would protect her children from the rattlesnake's bite. For this weaving she had soaked her pieces of chippa (willow bough) in a basket, had a large coil of kah-hoom (sumac splints for stitching) and a small coil of black tsu-wish (black-rooted tule). Her needle was a horny cactus stem set into a head of hardened pitch, and she also found use for a bone awl.

First she took her chippa (willow) from the water, dried it carefully with leaves, and then wound it tightly in a close coil the size of her thumb, spatting this together until it looked like a solid piece of wood, for this was the base of the basket. Round and round she coiled the chippa, one piece overlapping another, stitching the coils together with the satin-like thread of the kah-hoom, and drawing this through firmly. After a time she used a stitch or two of the black tsu-wish, gradually weaving this into a diamond pattern, the natural motif for a rattlesnake basket.

The basket artistry of the California Indians has never been surpassed by any people. Of course, there were expert weavers among the women, and others who did only poor work. But when we study the utilitarian purposes of these baskets, for which none of their artistic coloring or patterns were needful, and remember the fatigue and critical judgment necessary in order to assemble the materials for even one basket one cannot fail to appreciate the product and admire the ability of its creator. The Indian's passion for basket-making was intimately related to the most sacred feelings that dwelt in the soul of the maker, namely, those associated with the spirit world. To be sure, in California, Nature has been most lavish in her materials and placed there the finest textile plants which can be found for basket weaving, the woody white of the willow and the pure white of the inner wood of the red bud or cercis; one sedge which has a black root and the yucca with its red root, as well as its mottled green leaves which were used both whole and split. It is interesting to remember that the diversity of technique and patterns was the subject of common "squaw talk," and that at their numerous fiestas the women had ample opportunity to compare workmanship and exchange ideas.

A long time was usually required to complete a basket for each one contained many close stitches, and was shaped according to its purpose, large ones for storing seeds and acorns, smaller ones for cooking, flat ones for winnowing and cleaning seeds and sifting acorn meal, and deep baskets to be carried on the back during the gathering of the acorns. The materials used for these different types of baskets naturally varied from the one described by Mrs. Bandini. A Smithsonian report, however, is authority for the statement that willow (Salix), of various undetermined species was more widely used among western Indians (including the Coahuilla Indians of San Diego County), than any other plant. It was particularly needful for the various forms of coarse baskets used for storage. The San Diego Indians gave a deep black color to the strands of the sumac used as a sewing material, by soaking these for about a week in an infusion of the berry stems of the elder.

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With the ever-plentiful willow the Indians also built fresh-water fish traps which were cleverly effective. They set up a stockade just below some deep water hole, by placing a fence of stout willow stakes, set very close together, across the stream-bed. When this was ready, the children went a quarter of a mile or more up the creek, and then waded back, splashing and making all the noise and fuss they could, in order to drive the fish down the stream ahead of them. Arrived at the fenced water hole these could not escape, and another willow fence was quickly set across the upper end to prevent the fish from getting away again. Then a great feasting would follow. At night fires were built close to the edge of the stream, and when the imprisoned fish swam near to see this light, they were easily speared by the waiting natives.

It is known that the Indians had a method of making willow flutes as well as whistles upon which they could sound a few different notes.

But the part of the willow, in the method of their house-building, made this tree of the greatest importance to the savages. This activity has been graphically described by Millicent Lee in her "Ancient House of the San Dieguino Indians" in Art and Archaeology (Feb., 1928). Until after the advent of the Padres, the Indians built their homes after one conical pattern only. The huts were invariably bowl-shaped, covered with brush or mud, and set upon carefully chosen sites well protected from the wind. Whenever a new house was to be built, a circular clearing was made, sixteen feet in diameter. When the brush had been removed, twelve poles were set into the ground at the edge of the clearing, stout poles of either oak or sycamore alternating with more slender ones of willow, and all of the same height. Next these poles were drawn together and fastened at the top, leaving only a small opening for a smoke hole, and forming a rounded enclosure nine feet high.

To thatch the curved walls, yucca leaves were gathered, burned slightly until they were dark and pliable, and then tied together in pairs, ready for sewing bunches of deerweed, roots and all, into place to cover the walls. Thatching began at the base of the hut, with the bunches of deerweed always placed roots upward. A willow cross pole was bent over the layers of brush and a three-foot willow needle threaded with the yucca leaves was used to sew all into place. This was done by pushing the willow needle through from the inside of the hut, unthreading it while the first end was held firmly on the outside, and the needle again threaded and pushed through with the second end. The two ends were then knotted on the outside over the crosspole, the knots being placed about one foot apart. Tier after tier of brush was thus fastened upon the wall until the top was reached.

The door of the hut was formed of bent and arched willow, and was invariably rounded, as everything made by the Indians was in circular form. A curtain of skins was hung over this opening during cold weather, and fires were built in the center of the hut. And although much of the smoke escaped through the hole in the top, enough was ever present to cause many serious eye troubles, especially among the old people.

Furnishings of the hut were the metate (Hupe) and pestle (hum-mo-ki), the winnowing basket (sa-wil), leaching basket (Nya-pun), basket for seed (Ja-pa-tul) and the ollas and baskets for water and cooking. Other articles were hung on the framework out of reach of the younger children, most of whom slept on the bare ground. The older people had sleeping mats of deer or rabbit skin. Mrs. Bandini has her Indians gathering tules to weave sleeping mats, but Mrs. Lee declares the tule weaving to be "Mexican." However this may have been, the sleeping quarters were divided as follows: the father and boys on one side of the hut, the mother and daughters on the other.

When a new house had been built a feast was held upon its completion. There were races, an eagle dance, and the ancient "Song of the House" was sung as the people slowly circled about the new hut:

House build
Tops together
Make a circle
Make a circle
Slanting . . . it is held up . . .

So our common willow, one of the best-known and most easily recognized trees to be found in the gallery forests of the Southland, meant food, fire and housing to the original Californians. And, when we pass near one of our numerous picturesque cañadas, "populated," as the early Spanish Californians quaintly declared, with willows, dressed in their fragrant summer-green, how easy to feel ourselves quickly translated to the edge of the stream beside the willow stockade at the swimming-hole; or to picture the slow smouldering of the small pile of willow dust into a precious fire; or perhaps watch some young squaw heat a willow pad for her restless baby, attend to his other needs and then join the circle where the "Song of the House" is being solemnly sung.

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BOYCE THOMPSON SOUTHWESTERN ARBORETUM

For four days of the first week of April last it was my good fortune to be the guest of the Directorate of the Institution. It contains 2000 acres located at Superior, Arizona, at an elevation of 2400 feet. It is enclosed with a barbed wire fence to keep range cattle off the premises, and devouring the vegetation. Reference will be made to this necessity later on in the narrative. Within the enclosure is a fertile valley, several canyons, and two mountain peaks, each one a thousand feet higher than the floor of the canyons. It is a difficult task for me to put my impressions of the place on paper.

There are some experiences in life so blissful, so soul satisfying, so transcendantly beautiful, that a writer must be endowed with a rich vocabulary, and skilled in the use of words in the framing of sentences, if he hopes to convey to the mind of his readers a picture of the scenes which pass in review before his vision, no matter where his lot may be cast. Such were my experiences at that time. Once, when on an elevation, viewing the landscape o'er I was led to shout aloud:

"To be, just to be, is bliss
In a land so beautiful as this."

To make "The wilderness and the solitary place glad for them, and the desert to rejoice, and blossom as the rose," a prophecy made more than 2600 years ago, is being fulfilled in that Arboretum. To be sure it was in another land, but one very similar in soil and climate to that of the great Southwest. The primary object of the founding of the Arboretum was, and continues to be economic. That, however, is another story. The object of my visit was to study the Native Flora, of which little is known to Ornamental Horticulturists of the United States. If this recitation of the plants that came under my observation at that time will fire the imagination of seedsmen and nurserymen to the extent of inquiring into the merits of the subjects that I shall name, and create a desire in the heart of amateur gardens to grow them for pleasure, then the time spent in the preparation of the story will not have been in vain.

Of Exotics many are grown. Perhaps at some future time I shall have something to say of a few of them which were new to me, and from their behaviour there, I'm led to think that they will fit into the scheme of Pacific Coast gardens.

The plant that impressed me most is one of the Compositae. It is named for Prof. Liberty H. Bailey—Baileya multiradiata. The specific name is an apt one. By actual count there are eight rows of petals surrounding the disc. In botanical parlance these petals are known as "ray flowers." We shall not become too technical, lest laymen become critical. The flowers are a bright yellow, borne on strong, leafless stems a foot high. As a cut flower they will last for a week. The plant is an herbaceous perennial, covered with white tomentum, designed to prevent the evaporation of its sap. It will endure more drought than the popular Calendula. If, like the Calendula, it will break away from the type, and give us full double flowers it will be one of our most popular cut flowers.

Another member of the same tribe, that is plentifully strewn over the landscape is known as Melapodium leucanthum. I don't find this species named in any work at my command. It is a low evergreen shrub; the flowers pure white with a yellow disc. It, too, will last a week as a cut flower. Certainly we must have this gem in our gardens. Two Pentstemons, new to me were glorious in appearance. The specific name of one of them is: Diversifolia, the flowers light pink. The other is known as Wrightii, the flowers dark red, almost a magenta color. Both species send up flower stems three feet high.

Phlox stansburyi is a shrubby species. The flowers pure white. A plant growing in the depression of a hill, where the soil is deep and rich was four feet high, three feet diameter; a perfect bouquet.

A Sphaeralcea, one of the Mallow tribe is so plentiful that it brightens up the country with its delicate scarlet flowers, shading to pale orange. They are borne on wand like stems three feet high, very graceful in appearance. I was given the name Ambigua but it does not fit into the description given by Jepson.

Armstrong in her Western Wild Flowers names and describes a species which fits the one I'm talking about. She names it: Pedata. I'm going to swear by Armstrong. One afternoon while rambling over the hills I saw what I supposed to be a yellow Mariposa Tulip. Imagine my surprise when I came to the plant and discovered it to be, also one of the Mallow tribe. Hibiscus Coulterii is the name given me for this gem. It is another subject not named in any book I have. No matter, the flowers are glorified yellow Mariposa Tulips. Ten dark green slender bracts surround the buds which are enclosed in five sepals. The flowers like all of their tribe last but a day. It is a slender twigged, evergreen shrub, and very difficult to find when not in bloom. The entire plant is covered with a glandular coat of varnish, very like unto that of the Creosote bush. I found but three plants, and that there may be no difficulty in finding the seed when ripe, I marked their locations with strips of an old shirt sleeve I found in the

wild. And now, gentle reader, I must tell you that for the first time in my life did I see the wonderful Evening Primrose—Pachylophus marginata—I repeat wonderful for such it is. The flowers are pure white, salver shaped, each one four inches diameter and so numerous that the plants were completely hidden, as in a bank of snow. To be sure by noon their beauty had faded, just the same, they should be in all our gardens if they will lend themselves to coastal climatic conditions. A word here relative to the nomenclature of this family of the tribe: Onagraceae. For a generic name Jepson uses the word, Oenothera. This statement is made for the benefit of readers of these lines who do not have access to books on Botany.

And now for the final and the amazing part of this story. Awhile back I received a newspaper clipping from Honolulu in which an old timer of our desert wastes said that range cattle ate the fruit and the flowers of Opuntia fulgida. My credulity was taxed to the limit. I made up my mind to know how much truth or how much fiction was in the statement. Outside the Arboretum grounds where cattle roam and feed on the desert herbage, there was not a fruit or flower on those thorny trees. Inside the enclosure the fruit and flowers hung like strings of huge beads, two and three feet long. Armstrong in her book says: "the fruits being spineless and succulent are valuable for fodder." I had heard that statement before, and I decided to know if such was the case. I found out all right. I had to use a knife blade to scrape the spines from my fingers. I was also curious to know of the flavor of the fruit, therefore sliced one in two. It is pleasantly sub-acid, but there is so little pulp that it is of no value as human food, as is the Indian Fig; Opuntia ficus-indica, an exotic species. The common name of the native species is, Cholla.

Without the protection of a barbed wire fence most of the desert plants which now make the Arboretum a Mecca for the student of plant life, would be eaten by cattle who roam over the country, and the place become a desert waste. The world owes Mr. Thompson a debt of gratitude for the founding of the Arboretum, and liberally endowing it that it may function during the years that lie ahead.

The story will not be complete without reference to J. F. Crider, Director; Fred Gibson, his assistant, and Mrs. Naomi K. Jones, secretary-librarian. A trio of intelligent, industrious people who are in love with their work, and every one of them a cyclopedia of information on plant life: Exotic and Native.

—Peter D. Barnhart.

PLANTS GROW RAPIDLY IN "CLIMATE MACHINE"

A "climate machine," which regulates the light, humidity, temperature, air velocity, and soil moisture so accurately that practically any climatic condition can be reproduced, is used by the United States Department of Agriculture to speed up plant research work.

By use of this device soybeans, sugar-beets, and other plants have been grown to maturity and by regulation of the illumination and other conditions it is possible to greatly speed up flowering and other features of growth. The plants are grown with artificial light in inclosed compartments.

The department has experimented for several years with artificial light in giving plants a daily light period greater or less than the normal day length, and the "climate machine" is the newest feature to be perfected for use in these investigations. It was developed to its present stage by Dr. Robert A. Steinberg, a plant physiologist of the Bureau of Plant Industry. Outdoor air is taken into the air conditioner, saturated with moisture, and then heated to the desired temperature. The air then passes through the compartments in which the plants are growing at slightly less than a mile an hour, making a change of air eight times a minute.

Light for the plants in the apparatus comes from tungsten lamps immersed in globes of distilled water to keep them cool. The water cooling prevents the lights developing too much heat for plant growth. The day-length, air velocity, soil moisture, temperature, and the humidity are all regulated automatically, and when seed is sown in the soil in one of the compartments, practically all that needs to be done is to set the regulators. The soil-moisture control is so arranged that the plants may be said to water themselves and even to furnish a record of the water they use.

The climate-control machine should prove useful for studying the effect of climate on plants. With it research can be carried on rapidly and independently of seasonal conditions. It enables the experimenter to grow three to six generations of plants annually or to retard their development for long periods. It should also prove helpful in the study of disease-producing organisms of plants in reference to climate. Cost of operation precludes its use commercially for plant culture in the great majority of cases.

TREADWELL GARDEN

Mrs. Greer announced the invitation to members and friends to view the garden of Mrs. A. W. Treadwell at Point Loma on Sunday, May 29th, from 2 until 5 P. M.

Patronize the Garden Advertisers.

The California Garden

Editor
Silas B. Osborn
Associate Editor
Walter S. Merrill

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American Iris Society
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McKELVEY'S
Elite Printing Co. 851 2nd. St., San Diego

FINANCIAL REPORT OF SPRING FLOWER SHOW

Receipts		$505.05
Disbursements		
Advertising	$27.25	
Publicity	15.00	
Rent Building	35.00	
Trophies	62.75	
Certificates	14.50	
Mailing Certificates	3.56	
Clerks' Supplies	5.80	
Labor	28.25	
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Cards	.50	
Telephone	.90	
Laundry	4.18	214.14
		$290.91

Respectfully submitted,
Mary A. Greer, President.

REPORT OF APRIL MEETING

The San Diego Floral Association held its regular monthly meeting in the Floral Home in Balboa Park, with Mrs. Greer presiding, and who reminded the members what a splendid month was April with the seven glorious days of sunshine under the wisteria of the Robinson Begonia Gardens of Point Loma where all members and friends viewed the garden, listened to prominent speakers tell of their garden or flowers of their special interest, partake of a cup of tea and depart to tell more friends of the treat in store. Then followed the three days Spring Flower Show in Balboa Park which many though the best in years due no doubt to the abundance of rain this winter making for splendid growth of flower and vine. Following the Show, Mrs. Evans opened her lovely "La Collina Ridente" (The Smiling Hillside) to members and friends in honor of Miss Kate Sessions and in appreciation of her undertaking the planning and planting of the Aloes and Agava Garden in the Park. Mrs. Evans garden was at its best, even the wisteria in pink, lavender and white stayed over to help make the party a success, hanging gracefully and fragrantly over the pergola surrounding the canyon; even the water stayed in the river to add its touch of blue to complete the valley picture. Mrs. Evans generously sharing her garden with the public has planted a wide space outside the wall with rare tulips, iris, gladioli and roses climb everywhere, all properly named so all that read may know, but "If you have a mind at peace, a heart that cannot harden, Go find a door that opens wide upon a little garden." More than two hundred friends found that door and passing through realized, "One is nearer God's heart in a garden than anywhere else on earth." Next came the delightful journey to the mountain retreat of Mrs. Amy Strong at Ramona. Mrs. Strong's garden was especially lovely this year, the rare Beauty Bush being in bloom, with roses, iris, tulips and blooming shrubs to greet the eye. Mrs. Strong personally supervised the designing and construction of this magnificent home and garden. Mrs. Strong and her niece, Miss Meyers, guided the guests through the home and grounds and then to the picnic grounds where tables already prepared and hot coffee and tea ready for the guests who brought their lunch. Punch was served on the dining portico as the guests arrived. A day long to be remembered.

Mrs. Greer announced the Chula Vista Flower Show and the opening of the lovely garden of Mr. Frank Strausser on Sunset Boulevard to members and friends, the rare plants and trees of this garden is elsewhere written of by Miss Perry. Mr. Strausser car-

ried off many blue ribbons at the Flower Show. The Coronado Flower Show with its lovely setting among the trees, lending a charming background to the splendid display, was the next treat; following this came the La Jolla Show in the Woman's Club House and the Ocean Beach Show.

Mr. Milton Sessions our speaker of the evening chose as his subject "The Landscaping of the Home" and gave a most splendid informal talk, stressing careful study and thought to each outlook accenting a good view and depressing a poor one, covering deficiencies of architecture, softening weak points and drawing attention to good ones, enhancing the charm of a screened entrance. Lowering or heightening a house by yard planning and planting. A most enjoyable and enlightening talk enjoyed by all.

As this was Iris Night, Mrs. Paul Tuttle, Chairman of the Iris Section of the Flower Show gave a talk on the development of the Iris, from the common swamp variety to the glorious bearded, the Persian and Japanese and other varieties. Mrs. Wight spoke of the growth of the Persians and the Lovely Black Iris so admired at the Show. The display of blooms, blooming shrubs and rare vines helped illustrate the talks. There seemed to be a firm belief that the Iris could not be grown in San Diego and all owe a debt of gratitude to Mrs. Evans for her courage and determination in its effort which has resulted so favorably and in appreciation of her efforts she was made an Honorary Member of the Iris Society. Mrs. Bakkers showed several specimens of her glass gardens, telling us they needed no water and only occasionally a little air and assuring us there was a very distinctive style in gardens of the miniature variety—as well as in clothes or the color or rouge, etc. Mr. Jerabeck gave a splendid illustrated talk on flowering shrubs correcting most of us about the true name of the lovely white waxy fragrant syringa, saying it was the Philadelphus and that the eastern lilac was in reality the syringa—fancy changing those two distinctive harbingers of spring but then "A rose by any other name would smell as sweet." Mr. Wylie presented the Association with a beautiful hand tinted photo of our own beloved Miss Kate Sessions, taken in her Garden at Pacific Beach. It will be framed and hung in the room where she has given so very much encouragement and help to nature lovers—a new start to watch the growth of new blooms, and a new appreciation of the garden.

A lively discussion always follows the adjournment and all stayed long to view the blooms, to note the Cup of Gold and the picture showing its growth over three stories of the Rife home.

Mary E. Ward, Secretary.

ANNOUNCEMENT OF MAY MEETING

The May meeting of the San Diego Floral Association will be held in their building in Balboa Park Tuesday evening, May 17, at 7:30. Mr. Fred E. Wylie will be the speaker of the evening, taking for his subject "The design and construction of the Rock Garden and Pool." Mr. Wylie has given years to the study of this most interesting addition to the garden and his talk will be illustrated by hand colored pictures and slides of many of the finest rock gardens and pools he has built in San Diego.

Many other interesting ideas are in store for those who are fortunate enough to be able to attend.

MAY WEATHER IN SAN DIEGO COUNTY

Dean Blake, Meteorologist

Temperatures rise rapidly during May in the interior valleys of Southern California, and this increase results in lower barometric pressure and a steady air circulation from the ocean to the land. The land between the ocean and the mountains is still relatively cold which causes considerable cloudiness over this area, and May is generally deficient in sunshine, the average being lower than that of any other month. This condition also leaves the impression that the month is cooler than the records indicate.

Storms rarely occur at this time of the year and the long, dry summer, characteristic of the Mediterranean type of climate, prevails. Rain occurs mostly in the form of nocturnal showers, and the average amount is only .34 inches. Only 8 times since 1850 does the record show an amount in excess of an inch at San Diego, and falls are never heavy even in the mountains.

The prevailing winds are overwhelmingly from the west, but are moderate in velocity. High velocities are almost unknown.

Temperature ranges throughout the district are small; the damp air and cloudy skies keeping the maximum low and the minimum high. Danger from frosts in the agricultural regions is over until the winter, but sudden outbursts of hot winds from the interior at times causes excessive dropping of citrus fruits, and have a dessicating effect upon plants and vegetation in general.

SPRING FLOWER SHOW

The past flower show, sponsored by the San Diego Floral Association was its twenty-fifth one and it was universally considered fully the best show ever. First, for the very fine quality of the flowers and plants shown, the result in a great measure due to the bountiful winter rains.

The display of native plants and flowers by the San Diego Natural History Museum was exceptionally fine and a strong proof of the beneficent winter rains and weather. The two sorts of Yucca blooms were decidedly fine and the Ocotilla seemed more of a yellowish red than usual. They were gathered in that famous Borego canyon and portion of the desert which everyone hopes will become one of our National Parks. The Apricot Mallow is well worth cultivating and also the Encelia farinosa for its silvery gray foliage. The Creosote bush and Palo Verde tree (Parkinsonia Aculaeta) are the conspicuous green foliage plants of the desert. Desert plants have mostly grey or whitish foliage. The Desert Holly is so conspicuous and also the famous Smoke tree, that bears clear blue flowers for their white foliage.

The exhibits by the schools showed much study and time in collecting, preserving and describing, all in book form and their botanical studies.

The Montalvo Garden exhibit was excellent, a large display principally of Rex begonias, a few other species and some fine specimen ferns. It was the largest variety of Rex begonias ever exhibited at any previous show and was particularly fine for a spring exhibit.

The section displaying Japanese arrangement of flowers had more exhibits than in previous shows and was particularly fine.

The miniature dish and tray gardens proving a creative art were extremely fine, and had many entries.

The display of the Rose Court Nursery was unusually fine and well presented: ferns, flowers, trees, succulents, shrubs and choice and showy annuals. The potted Schizanthus should have made every observer ambitious for a bed for next yea's flower show. This and Nemesias are both excellent for winter and early spring display and for cutting. England often makes a complete show of potted Schizanthus and when called the "poor man's orchid" makes them more attractive.

The display of arranged baskets of flowers was by far the finest ever shown and proves plainly the value of the shows as an educator and developer of quality and beauty.

Among the vases and bowls of flowers the large one of Pink Wisteria, by Dr. Karl Kellogg, of Chula Vista, was the most conspicuous.

The vases of Iris were especially fine both in quantity and variety and proved their fine decorative quality as a cut flower. The large display of cut Iris from a Pasadena Iris specialist, all named and the large varieties shown by the many local exhibitors, also named, were of an educational value—but its value as a whole had no comparison to the one table of Iris in vases.

The Iris has certainly come to stay with us and each year will be a more attractive section of the Spring Flower Show. The interior with its higher altitudes and colder seasons will be better for Iris always.

The sweet peas and snapdragons were good and many small displays of various choice flowers were noticeable.

Notably, for the first time the terrestial orchid, Pletia Hyacinthifolia, was shown. This is rather hardy and is in bloom by the middle of March as a rule.

A display of Succulents by the Soledad Rock and Water Garden Nursery was by far the most educational display of its kind ever exhibited in San Diego. Some 12 trays, each filled with a special class of miniature plants, all labeled, was well worth close study. Mesembryanthemums, Sedums, Sempervivums, Crassulas, Cotoleydons, Gasterias, Hawarthias, Kleinias and several others, each flat showing 18 to 20 varieties of each genus.

Mrs. Amy Strong, of Mt. Woodson Farm, near Ramona, displayed for the first time the famous Beauty Bush, Kolkwitzia amabilis in bloom and the high bush Cranberry in foliage and bud. Both are destined to be conspicuous plants for the colder locations of our county and in time the high bush Cranberry, Viburnum opulus, will be as conspicuous in our flower shops as it is in Paris—for its beautiful autumn foliage and brilliant red berries, both on the same branch. Both of these choice plants are deciduous and need a frost to feel at home and flourish.

The Rose display was absolutely a grand one, thanks to the fine winter rains, both as to quality and a greater variety than previously. Mr. Hieatt's specimens took several ribbons, as well as those of Rancho Santa Fe Nursery.

Miss Sessions displayed some new shrubs and uncommon specimens. The little red flowering bulb (miscalled red Freesias) being particularly noticeable. Also some conspicuous Junipers, J. Conferta, a good prostrate grower for coast localities and the erect Juniper Virginiana var. Viridis var. Corymbosa, labeled the "World's Best."

The display of Cacti by the Knickerbocker Nursery, in small receptacles, was particularly well presented and won a first prize.

The Spring and Fall Flower Shows are

always such pleasant social affairs, one meets old friends and flower lovers and garden enthusiasts that are not often met otherwise.

There is plenty of strenuous work for those actively engaged in the management and they deserve a great deal of credit and the appreciation of the general public. The attendance was up to the average.

WISTERIAS

By K. O. Sessions

Mr. Herbert Chase of Escondido is making a specialty of Roses and Wisterias, he writes some interesting facts of the Wisteria.

"The pink blooms from Mrs. Herbert Evan's garden, 1506 Plumosa Way, were sent by air mail to the Arnold Arboretum in Boston, and Mr. Alfred Rehder, the Curator, identified it as Wisteria floribunda, variety Rosea, and said the pink was a deeper shade than the one there.

In a row of white Wisterias grafted from Miss Sessions multijuga white in 1930, the plant at the end was not very promising in appearance but on April 5th I noticed a change as though trying to start a flower bud, two days later the bud was decidedly larger and I gave it 12 quarts of water from a brook and a few days later a bloom had developed 12½ inches long and other buds on the plant had not expanded.

Another case: Plant No. 3 in the white row had buds larger than those on other plants. Little change until April 1st when they seemed quite different and I photographed it. The plant had four branches 5 feet long and they were pruned back to 10 and 14 inches.

This plant was balled and reset in the home garden, probably moving the plant would surely stop its blooming but on April 9th there were 37 blooms on it and it was photographed. "The graft was made in March, 1930, and I have heard that it paid to graft with blooming wood and now I am quite certain that is true," Mr. Chase wrote.

These facts certainly help to prove that Wisterias need quite severe pruning for best flower results. The Japanese frequently use it as a potted plant. The main old stem or stems, 3 to 4 feet long, with apparently few short side branches, yet when in bloom it is solid with color all over. Such plants may have been kept in pots for many years. After they have bloomed they make a growth which when dormant is cut severely back each year, awaiting the blooming season.

Dr. Karl H. Kellogg of Chula Vista won first prize for his beautiful vase of pink Wisteria blooms at the Flower Show on April 9th and the color was the same as Mrs. Evans' variety.

Mr. A. D. Robinson's is Wisteria Chinensis, the Multijuga lavender and Multijuga white are those with the longest flower racemes.

The double purple is the only double one. There is a very short white and a short lavender flowering sort that are not very desirable, racemes only 6 inches long, flowers very large. There are at least two or three others of paler lavender tints, each one attractive, for a collection only.

The native American is W. frutescens, found growing in low ground in Virginia to Florida and Texas. It blooms freely during several months of the summer and is deciduous during the winter. The lavender racemes are only 4 to 6 inches long.

WILD FLAX DROPS SEEDS ONLY WHEN RAIN FALLS

A wild, yellow-flowered flax, so adapted by nature to a dry climate that it drops its seeds only when rain falls, has been discovered by cereal specialists of the United States Department of Agriculture.

The flax, behaving exactly the opposite of domesticated varieties, opens its bolls to release its seeds only when wet. Thus, growing in a dry region, the seeds are released only when there is rain to start them growing.

Intricate plant parts are necessary for the process. The flax boll, which contains the seeds, is partly covered with a waxy, waterproof coating but has tiny openings near the bottom of the boll. Beneath the waxy outer coating is a porous layer which soaks up water rapidly as it enters the openings. As the water is absorbed, the porous layer swells and pushes open the fine segments of the boll, allowing the seeds to drop. The boll will open in a few moments if wet by rain or dew, and closes again when it dries.

The several species found in the semi-arid regions of the West have no commercial value, but are considered an interesting example of adaptation to natural conditions.

THE JUNE MEETING

The June Meeting of the Floral Association will be held in the Floral Building in Balboa Park Tuesday evening, June 21, 1932, at 7:30 P. M. This is the annual meeting with election of directors to serve for the ensuing year. There will be a fine program and social evening with refreshments.

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FREAKS IN PLANT GROWTH

By Bertha M. Thomas

Every individual specimen of vegetable and animal life has individual characteristics, sometimes small ones, but quite often they will be so strangely different as to be amusing or valuable, or both. For instance, the so called crested forms among cacti, the more grotesque, the more valuable. While visiting a prominent nurseryman who has an incurable cactus fever, he asked us, "Do you see Hoover's brains over there " and he pointed to a pot containing an almost perfect brain shaped growth. "Paid $20 for that, but just had to have it." And he probably sold it for several times that sum.

These freaks appeal to us because they puzzle us. Many of us read of one in the garden of Ramona's Marriage Place, which is truly worth a visit. It is an Echium, a family of plants coming from the old world, with one exception, and ranging in color from pure white to shades of blue, pink, and red. Flowers are small, in racemes, and these racemes grow on a central stalk which is often 3 or 4 feet above the plant. This particular plant chose to exhibit two ordinary flower stalks with two others growing flat instead of round, about a foot in width but somewhat twisted. One of these peculiar flat growths had also a small ordinary round stalk growing out from one side of it. The color of the blooms is a very pleasing pink. For several years Miss Sessions has been raising Fuchsias from a freak plant which grows blossoms of large size, beautiful color, and its peculiarity is in the fact that the blossoms have two or three stamens which have small petals developed at the end of them while the remainder of the stamens have just the ordinary everyday ending.

Last summer we had a Panama Pacific Water Lily which began throwing out an immense number of leaves and blossoms but they also began growing smaller. Curiosity led me to investigate and found the bulb-root, instead of being round, as any well behaved tropical lily bulb usually is, had burst from its bounds and was throwing up an elongated arch from its center. The entire bulb was dividing into innumerable little plants, each leaf on the outer edge already was an individual plant with small roots and a blossom and countless little ones trying to burst from the center of this freak bulb. We cut the mass into small pieces and replanted. Those divisions are still growing and dividing into small plants. If all had been saved there would have been at least two hundred or more, I could not guess how many for the center of that bulb was still throwing out those little, tiny leaves this spring when I threw it away, and we proved by experiment that those very small leaves would each one make a plant if cut with a fragment of the bulb attached.

Ordinarily the Panama Pacific is prolific as it is viviperous. Also ripening seed pods occasionally, and small bulbs grow from the mother plant, but the latter happens only rarely.

The spring flowering Sparaxis is almost a freak for reproduction. The bulb increases itself. Smaller bulbs also form at axil of the lower leaves, and seeds are formed from blossoms. We raised some seedlings four years ago which came into bloom two months from time of planting, and gave us a variety of handsome new colors, among them being two beautiful shades of blue.

SOPHORA SECUNDIFLORA

Who of the readers of this journal know this shrub? I met with it at the Santa Barbara Flower Show last April. The clusters of blue flowers were beautiful to see, but the most attractive thing about them was the delicious odor. A combination of lemon, rose, and apple blossoms. I made mention of them in an article for Florists' Exchange which caught the eye of Donaldson Rector, a florist of San Antonio, Texas. He was gracious enough to write and tell me of the shrub, a native of that part of the great state. I quote from his letter: "This Sophora is very abundant in a small section, north and west of the city. Some years when we fail to have late summer rains it does not bloom abundantly. It is a bush; sometimes a tree 20 feet high. A thicket in full bloom is a rare sight, and the fragrance heavily scents the air of the neighborhood. The perfume is so heavy that the cut sprays are seldom used for ndoor decoration. After the blossoms are gone, the silver-grey seed pods persist through the winter, and sometimes do not drop the big red-coral colored seeds before the plant is in bloom again. The date of blooming is from February to April, inclusive." A lot of those seeds for me this year, and they shall be planted en masse, where the shrubs are to grow, that when in bloom the air shall be heavily ladened with the perfume, and Rector the Florist, will furnish the seed. My imagination is all wrought up over the wonderful display those shrubs will make when mature.

—P. D. B.

Complete files of California Garden Magazine can be had at reasonable rates by applying to M. A. Greer, 2972 First Avenue.

The Garden

By Walter Birch

Garden pests, more particularly snails, aphis and cut worms, with the accent on cut worms, are more than usually pestiferous this season, and therefore call for persistent attention at this time. For snails and cut worms use End-O-Pest or Snarol, both equally good, and ready for use. Scatter the poison close to the plants, not on them in the evening, after thoroughly spraying the ground with the hose. Sprinkle the ground lightly every evening before dusk for four or five days. This keeps the poison damp and helps to attract the snails, slugs and cut worms and brings them into action during the night. Cut worms are usually found close to the plants just below the surface of the soil, so when they are the culprits be sure to put the bait close to the plants, giving them every chance to feed on it before getting to the plants.

For aphis, Black Leaf "40" is still the most popular spray, using at the rate of a teaspoonful to a gallon or twenty drops to a quart of water, adding a little soap to the water. Or if you are spraying delicate foliage or flowers, you will find Evergreen spray, a non-poisonous preparation, very effective for aphis and many other insect pests. It will not damage or stain either foliage or flowers.

It is time now to plant your Chrysanthemums for fall and early winter blooming. There are many attractive and beautiful varieties from the small button and pompon class to the immense exhibition type. All need partial sun and generous treatment regarding fertilizer and water. Set your plants about one foot apart and if you want large flowers pinch back and disbud liberally, or for general garden effect and cut flowers, stake where necessary, water and fertilize liberally, and you will have plenty of blooms. The button types are particularly good for bouquets.

For earlier flowers during summer and running into fall we have the beautiful dahlias, also coming in miniature blooms and on up to flowers of immense size, calling for the same general treatment as mums. Avoid using animal manures at time of planting, but after the plants are good and strong a surface mulch of well rotted manure can be used and very gradually worked into the soil. Thorough cultivation is important but not close enough to injure the roots. Plant tubers about three feet apart, pompons can be planted closer, dig holes about six inches deep and lay tuber flat, driving a four foot stake an inch or two from the neck of the tuber where your bud will come. The ground should be moist, not wet, at time of planting and a uniform moisture reaching down below the roots at all times. When plants have made three sets of leaves pinch out the top to induce branching. Support plants by tying with soft cord or strips of muslin to stake. To get large blooms disbudding will be necessary. Spray plants occasionally with the hose to clean foliage and help get rid of insect pests, and use Black Leaf "40" or Evergreen Spray for aphis and other pests.

Make another planting of gladioli bulbs and be rewarded by a crop of these beautiful flowers in three months from planting time. For best effect in the garden plant in groups in a sunny location remembering that the flowers will always face south and west. They do well in any good soil and when plants are a few inches high it is a good thing to mulch the ground with a well rotted manure. Depth of planting depends on the character of the soil, if it is light six inches is not too much, but if heavy four inches is better. The advantage of deep planting is that at blooming time the heavy stalks are less likely to cause the plant to topple over. Glads need a good supply of water followed by cultivation after they are a few inches high.

Set out more plants of Zinnias, Asters, Petunias and Marigolds, all of long flowering season and easy of growth. Coreopsis is also a great summer bloomer, a splendid cut flower and easy to grow.

Salpiglossis growing two to three feet high and literally covered with wonderfully beautiful trumpet shaped flowers of many exquisitely veined colors can also be set out now.

May and June are the favorite months for planting Water Lilies in pools or smaller receptacles such as tanks or tubs. They are easy to raise, and a small or large lily pool makes a delightful contrast to the surroundings, adding a restful and interesting note, especially if there are a few gold fish inhabiting the pool. When planted in boxes in the pool containing good soil and fertilizer with a coating of sand on top, they make a quick growth and flower in a short time, by using

plants of large size.

A good selection would be such varieties as Rose Arey, very free flowering, color clear cerise pink and six to eight inches across. Conqueror, large flowers of bright red, Comanche, dark copper orange, Cromatella, bright canary yellow, and Blue Star, a delightful blue. If you do not wish to build a pool you can sink a large tub or tank in the ground and plant your lilies in properly prepared soil in the bottom of the tub.

NOVELTY PLAYS IMPORTANT PART IN FLOWER SHOW

Miss Kate Sessions' Corner Was Alive With Unusual Displays; Surprises Many

Novelty played an important part in the success of the San Diego Floral Association's Spring Show this year. The annual event was made twice as interesting with the added attention given to the new and different.

Always foremost in anything like this, Miss Kate Sessions' corner was alive with unusual plants. There was the high bush cranberry, in bloom and looking like a greenish snowball to which it is related. In autumn it is on fire with red berries and red foliage. It is a plant for back country San Diego. So is the rosebud, also displayed by Miss Sessions with the news that it is native in some parts of the county. Miss Sessions also had some melaleuca tenella, a bottle brush on the doll order which she had found growing in La Jolla. It has tiny round fuzzy yellow flowers like an acacia and its "bottle brush" seed pods are so tiny one has to look twice for them. Babiana stricta, an African bulb flower in her display revealed a glorious indigo blue shade. There was also bryaphyllum uniflora, a succulent for hanging baskets with pink flowers as dainty as any woodsy dicentra or bleeding heart.

Unusual Feature

A round huge flower tray blooming with 15 varieties of mesembryanthemums was an unusual feature of the Neff K. Bakkers' exhibit. Fifteen very pretty ones and most gardens have only one or two. F. W. Wylie's pool rockery differed from the usual in that it presented a realistic slice of wildwood, a hidden spring drip and a rocky ledge instead of, for instance, a fish spouting water in a circle of concrete.

A full table of Japanese flower arrangements demonstrated the success of this idea started at the show several years ago with but two or three exhibits. Yellow and cream iris ochraleuca rising from a bronze attracted particularly.

Visitors hovered over the dish garden displays constantly, enthusiastic and exclaiming. These too were something different. They were constructed in all sorts of containers, fish bowls, trays, hollowed out tree knots, and dishes, bowls and pottery jars. Japanese and English gardens in miniature were set forth on the trays. Yellow mesembryanthemum was blooming in yellow bowl against dark soil and white and brown rocks. Nemesia plants, sometimes difficult in the garden were flowering gaily in soil in a pretty dish. A broken olla held a fine cactus garden with natural touches which included a snail. The root knot gardens with their ferns and moss were centers of interest.

Basket exhibits too, gave off the air of novelty. There was pink wisteria, really pink and not lavender, arranged in a cream wicker container; a dainty basket of pinks, candytuft, lineria, and schizanthus (a very good combination, by the way, of these smaller flowers); a striking combination of blue Dutch iris, orange venidium, and azure cynoglossum in a brown basket; and young Charlotte Braun's artistic little greyish tan basket holding heliotrope and bronze colored tulips with tiny purple iris, little brownish red ranunculus and purple hued grass.

The use of colored table clothes opened up great possibilities in the table decoration department of the show. Cloths matching the flowers were seen on almost every entry. Mrs. Fred Gazley went a step further and on a smooth dark surface imitating bare polished wood set a most interesting table on which she did away with the center bouquet, having a square mirror and bubble bowl resting on one corner in its place. She had flowers on the table but they were in three vases, one tall and two short set where they would not interefere with the guests' vision. Unique pottery dishes in blue, green, and orange colors were used and raffia mats. The flowers were blue columbine for the most part and divided honors with the interesting dishes instead of vying with them.

Wonderful new iris in the iris section included Mrs. Paul V. Tuttle's El Capitan with its blue blossom as long as one's hand (provided it is a long hand). Milliken, iris creator supreme, had new marvels present: Cameliard, buff, bronze, and yellow; Loudoun, a dream in fawn color; Western Skies, blue with airily lifted falls; Modoc, large, dark, and heavy; Bellorio, small and slate colored.

The roses, new and old, were too numerous to mention but the new Herbert Hoover stood out well for its fine form and pink-stained buff color. Souvenir de Madame Boullet was distinguished by wonderful stems and cream orange buds. Julien Potin displayed itself as a wonderful new yellow.—Senorita Jardinera in The San Diego Union.

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SAN DIEGO CLIMATE JUST RIGHT FOR FINE DAHLIAS

By Ada Perry

Dahlias are naturally adapted to San Diego climate. These gorgeous garden flowers grow and blossom here with an enthusiasm that knows no bounds. Plant dahlias and you will have them in great abundance.

The dahlias is not inherently delicate, so plan on giving it sensible treatment. Overhumoring a dahlia is something like trying to raise a potato in a hot-house.

Give your dahlias plenty of sun. A little wind won't hurt them. The soil should be dug carefully and as deeply as possible. It need not be especially fancy. Thorough, deep pulverizing is important as the fat toes of the dahlia plants like room to expand and develop. But do not despair if it is sandy or the other extreme, sticky. Incorporate leaf mold with the sandy and gypsum with the sticky, and add a good cured manure to both to be thoroughly mixed in. Bone meal is excellent, too, in any dahlia bed.

Look for Sprouted Bulbs

Get your dahlia tubers already sprouted. It's the safest and surest way. Look for the sprout at the neck end of the tuber. No matter how fat and smooth that tuber looks it is no good unless it boasts of a sprout bud off the parent stalk.

At the same time you get your tubers look around for stakes for the tall, large varieties. The pompon dahlias do not need stakes if you train them to bush thriftily, but it is a risk to have the large kinds coming into bloom without a stout stake at the back of each plant. Four feet is long enough for the stake and, driven in one foot, it will soon be out of sight covered by the plant it is guarding against breaking. Raffia is excellent material to use for tying the plant to the stake.

Set tubers, sprout pointing up, in soft, deep earth in a hole four to six inches deep. Drive in the stake some eight inches back. Then cover the tubers. How deep is a matter of opinion and experience. Some dahlia sprouts are stronger than others and can push up through nearly half a foot of soil with fair ease. But others get discouraged and even give up the attempt altogether. A good plan is to cover the weakly sprouted tubers with a couple of inches of soil at first and fill in as the sprout gains strength and ambition. It is not wise to set the tuber in a shallow hole in the first place. Dahlias need a good foundation.

Beware Deadly Snail

Guard your dahlia sprouts against snails with either fine wire collars or a "magic ring" of snail poison, ashes or cinders.

When your dahlias are 12 inches or so high you will want to go among them looking carefully for the fat center bud which will push up and bloom early, monopolizing the plant. Pinch it out and the plants will branch handsomely. More disbudding will follow, but it will consist in leaving the center buds on each branch and allowing the branches to form side shoots only in the two or three-leaf axils near the stalk.

Pompon dahlias should be disbudded as well as the large kinds, but only for the purpose of making them bush out. Disbudding does not greatly influence the size of their flowers, but it does their quantity. So center pinch the plants as you do the large kinds. When the side branches form centers, pinch these a time or two, also. You will have round, symmetrical plants fairly popping with pompons.

Varieties of dahlias seem to be settling down to a sensible number of established favorites after an unprecedented whirlwind of new introductions. This is a mercy. A defenseless flower lover has time to get acquainted with them now instead of being rushed from new flower to new flower like a mad series of strange faces at some huge party.

Some to Choose From

Yellow "Avalon," salmon rose "Dr. Tevis," mauve "Mrs. I. de Ver Warner," pink "Jersey's Beauty," scarlet "Tommy Atkins," all large dahlias, are just as lovely this year as they were last, and the year before.

"Tryphinnie," shell pink; "Robert Treat," American Beauty shade; "Mrs. Carl Salbach," lilac, and "Eleanor Vanderveer," rose pink, are wonderful, too, and have been favorites long enough to establish themselves. One favorite that the writer thinks deserves a rest is "Golden West," but this is a matter of opinion. Other yellows are "Queen of the Garden Beautiful," "El Dorado," and "Orange Gold." These might be tried by those desiring a successor to "Golden West."

Pretty pompons include "Amber Queen," "Ariel," buff, "Dee Dee," lilac, "Alice Rockwood," old rose, "Joe Fetti," white, "Little David," deep orange, and "Scarlet Gem" and "Yellow Gem."

The last thought is, plant dahlias for the Olympic games visitors.—San Diego Union.

MAGAZINES WANTED

Copies of California Garden Magazine of January, 1921, requested.

Patronize the Garden Advertisers.

SAVE-THE-REDWOODS LEAGUE SUCCESSFUL IN PRESERVING PRAIRIE CREEK REDWOODS

Success in the effort to preserve the Redwood forests in the Prairie Creek region of northern Humboldt County, California, has been announced by J. D. Grant, chairman of the Board of Directors of the Save-the-Redwoods League. With the recent purchase of 4,892 acres of superb Redwood forest in the heart of the magnificent Prairie Creek region by the Save-the-Redwoods League and the California State Park Commission already an accomplished fact, the most essential portion of the League's Prairie Creek Park project has been accomplished. Several privately owned tracts within the area have been acquired, notably 286 acres at Boyes Prairie, at the southern boundary of the new park area, and the Cottrell claim of 160 acres, bringing the total acreage acquired to date in the Prairie Creek district (including the Russ Grove, Roberts and Leach tracts and several parcels of vacant Government land) to approximately 6,000 acres at a total cost of nearly $1,000,000. The primary unit of the Prairie Creek Park will thus extend from Boyes Prairie, about 5 miles north of Orick, or 342 miles north of San Francisco northward to the Del Norte County line, for a distance of about seven miles; and from the ridge which divides the Prairie Creek basin from the Klamath River watershed on the east, to a minor ridge on the west which is located in general about half a mile from the Redwood Highway. The highway penetrates the heart of the park for its entire length.

The substantial land acquisition in the Prairie Creek basin was made possible largely through the splendid gift of Mr. Edward S. Harkness of New York, who contributed $500,000 (which was matched in part by private gifts donated through the Save-the-Redwoods League), together with $150,000 allocated to it by the State Park Commission. With the acquisition of this primary unit, the essential parts of three of the League's four major projects have now been preserved. These are the Bull Creek-Dyerville Forest, 45 miles south of Eureka; the Del Norte Coast Park, 10 miles south of Crescent City, and the Prairie Creek Park. Small acquisitions have also been made in the Mill Creek-Smith River area north of Crescent City.

In addition to the properties described above, the League has an option for a year and a half on a beautiful forest tract of 3,270 acres in the Godwood Creek basin, and while at the present time there are no funds in hand for its purchase, it is hoped that the necessary amount may be raised before the expiration of the option. Godwood Creek is one of the tributaries to Prairie Creek west of the Redwood Highway, and the surrounding area is a fine example of the unspoiled "wilderness" type of forest which is one of the outstanding characteristics of the park as a whole.

Differing widely in character from that of the Redwood forest of southern Humboldt County, with its heavy "flats" of virgin Redwoods along the river bottoms, notably the Eel, the South Fork of the Eel, and Bull Creek, the Prairie Creek forest combines both the "flat" type with the "slope" type, affording splendid examples of both. However, while the stands of southern Humboldt County are largely free from the admixture of other forest species those of the Prairie Creek area—both "bottom" and "slope"—contain a goodly number of hemlocks, spruce and fir. Even these trees however seem to be on a larger scale than the common run of their kind; while the redwoods are generally of great size and symmetry. While the majority of the largest specimens do not compare in size with individuals in the main Bull Creek and Dyerville Flats, there are nevertheless many outstanding giants—the "Big

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Flower Designs

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Tree" north of Boyes Prairie being probably the best known, with a diameter of 17 feet 7 inches, breast high, which is the timberman's standard method of measurement. The "slope" timber is unusual in quality, size and density of stand, and the exquisite forest cover very luxuriant. Numerous varieties of ferns, notably the great sword ferns and delicate Lomaria, grow in almost tropical abandon, and rhododendron, huckleberry and other shrubs form a veritable jungle, which, except for a few old trails here and there, is well-nigh impenetrable. The clover-like oxalis thickly carpets the forest floor and in spring is richly embroidered with patches of wild iris, purple and yellow violets, delicate white trilliums and Redwood lilies. In late May the deep rose rhododendron bursts into its rich flamboyant bloom. In the midst of the woods are many venerable Western maples, the branches and trunks of which are entirely moss-covered. The silver fir, a symmetrical and beautiful conifer, is found here, and the young Redwoods, often springing from the stump of a fallen parent tree, seem, in contrast with the mother-tree, to be members of an entirely different species, so graceful and delicate do they appear beside their towering, massive elders.

The principal streams tributary to Prairie Creek are Godwood Creek, west of the Redwood Highway, and on the east, Boyes Creek, Lost Man and Little Lost Man Creeks. These are all picturesque brooks bordered exquisitely with typical waterside growths—alders, willows, maples, the California laurel (locally known as the "Pepperwood") and a variety of plant forms which give not only great beauty and variety to the scene, but also afford a wealth of interest to the botanist and student.

The Prairie Creek Park project as originally conceived included an outer strip which extended from the Coast Slope (the present western limit of the park) to the Pacific Ocean, and included about twelve miles of varied coastal scenery, from the rugged and virile rocky shores to the sandy beaches at the mouths of the seaward streams. This is an area of marginal forest and open meadowland and field; an ideal recreation overflow area for the park of the future. This outer area includes the well-known Gold Bluffs along the Pacific Ocean, where early-day mining activities were carried on. Although great interest centered in this region at one time, results did not justify continuance of operations and the activities were abandoned. The remains of one or two old mining establishments may still be seen along the bluffs. While the acquisition of this coastal strip does not appear feasible at present it may be that in future means may be found of adding it to the present park.

Among the interesting features of the Prairie Creek region are the bits of the old winding County Road, roughly paralleling the Redwood Highway, and in general lying a few hundred yards from it. The League hopes sometime to be able to have these remaining links connected with other stretches still to be surveyed which will include the most beautiful and picturesque parts of the forest and which will form an alternate route to the excellent surfaced Redwood Highway. The purpose of this "Scenic Rambling Route," upon which a preliminary report has been rendered by Mr. Emerson Knight, landscape architect, would be to afford a more leisurely and picturesque drive to those travelers whose esthetic tastes and love of the wilderness would cause them to seek the forest's heart; as against those who would wish to use the more swift and direct Redwood Highway. While no definite steps have been taken toward completing the "Scenic Rambling Route," the League hopes the plan may be carried out in the not too distant future. If surveyed to include the loveliest stretches of the Prairie Creek Redwoods this alternate route might well become one of the world's unique scenic roads.

Another interesting feature of the park is the herd of Roosevelt Elk which roams between Prairie Creek and the Ocean. This species, like the California Grizzly Bear and the American Condor, is now nearly extinct. Only about three hundred head of the animals remain in this region, according to game authorities. These native creatures are seldom seen in daylight but may be noted occasionally emerging from the forest and wandering along the ocean beach. It is hoped for the future that the park may become a sanctuary for these Elk—where they may be adequately protected from man and beast. To many, the friendliness and fearlessness of the native animals in our national and state parks, which have been protected all their lives, are among the inspiring features to be found in these preserves.

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HAKEAS

By K. O. Sessions

The genus Hakea belongs to Australia, and 53 species are listed in recently published list at Melbourne. Bailey's Encyclopedia of Horticulture mentions but eight because so ill adapted to general cultivation in the United States and Europe. Here is one of the facts that makes San Diego and her nearby surroundings stand out prominently. We have growing well locally the following six species: H. Acicularis, Elliptica, laurina, pugionoformis, saligna, suaveolens. It would seem quite worth while to secure seeds of some of the other 47 varieties to also try out here.

H. Acicularis lately introduced by the United States Government resembles pugionoformis both in its dark green color, narrow and sharp pointed leaflets. Though pugionoformis is decidedly more pugilistic as its name signifies. Both are compact growing shrubs that would make excellent protective hedges, for both man and beast. H. Elliptica has a smooth oblong leaf four inches long, one to one and one-half inches wide, strongly veined and edges red tinted. It is an evergreen, a very symmetrical grower and makes a fine small tree or large shrub. H. Saligna, willow like, has narrow and rather colorful foliage, the slender branches somewhat drooping like a willow. It has become a fine, quick growing shrub about San Diego. As it stands some pruning it can be kept within bounds and should always be kept full close to the ground and not trimmed up and naked at the base. Its flowers are white and small, hugging the stem, so not very conspicuous and almost useless for cutting. H. Suaveoleus resembles the first two described both in foliage and habit but is decidedly less pugilistic though each leaf bears a point. It is a fast grower and may reach ten feet and should be planted five to six feet apart. It has been successfully grown along the coast and close to it, and an excellent asset for such a location. H. laurina is by far the most individual of the six and makes a fine, small tree. Its foliage four to six inches long, heavily nerved, an inch or more in width. It is also an evergreen but is conspicuous for its handsome flower two inches in diameter, a soft rosy red and full of white stamens. In its native land it is called the "pin cushion tree," and on the Riviera, Southern France, the "sea urchin tree," while often here one is asked if it is a new Eucalyptus; it has been named by some—Eucalyptoides. It makes a splendid sidewalk tree and especially for narrow streets and being a winter and free bloomer is another fine asset for its use in the parking space. The Woman's Club House and La Playa on Point Loma have placed it in front and the row is very even and good looking and well worth an observation.

THIRTY-FIVE ACRES TO BE DEDICATED AS A WILDFLOWER REFUGE

As the result of two recent meetings when the Rancho Santa Fe Garden Club had the pleasure of hearing Charlotte Hoak, Nature Supervisor of the Los Angeles Schools, and Mrs. Lester Rountree of Carmel, speak on the subject of California's native flora and its conservation, the Club has voted to assist the Rancho Santa Fe Home Owners' Association in preserving the natural parks which have been deeded to it by The Santa Fe Land Improvement Company. These comprise some thirty-five acres in various parts of the Rancho, and can readily be developed with native shrubs and flowers and turned into what Mrs. Rountree terms "Wildflower Refuges," a place where desirable native plants can be transferred as further development of land takes place at the ranch.

Among the native plants which grow at Rancho Santa Fe, and will doubtless be well represented at these "Refuges" will be manzanita, ceanothus, rhus integrifolia or lemonade bush, toyon, elder, yerba santa, mimilus, romero, pentstemon, mission bells, maidenhair fern, sea dahlia, yucca whipplei, yucca Mohavensis or Spanish Bayonet, tree mallow, tree poppy, and others perhaps less known.

To make a natural "Wild Garden" where all these beautiful natives shall be safe from destruction forever is a project which will insure the continuance of all the early efforts of the founders of Rancho Santa Fe, where nearly every estate has preserved some few fine native plants, even when landscaping has required many changes. The work of this new committee has been placed by Mrs. Norman Carmichael, president, in the hands of Dr. Carl Bertschinger, member of the Garden Club and one of the directors of the Association.—Ruth R. Nelson.

LILIUM WALLACEI

By C. I. Jerabek

A lovely Japanese Lily of a rosy-apricot shade with dark spots was brought to the Floral meeting Tuesday, April 19, by Mrs. E. A. Reif, no one there could identify it, but later Miss Mary Mathew identified t as the Wallace lily (Lillium Wallacei). It grows best in a sunny place among dwarf shrubs and likes moisture. For illustration in colors see W. E. Marshall book called "Consider the Lilies" (second edition).

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